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10/748,164

12/31/2003

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6958

7590 12/27/2006  
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EXAMINER

COONEY, JOHN M

ART UNIT

PAPER NUMBER

1711

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|-----------|---------------|
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3 MONTHS

12/27/2006

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/748,164

Applicant(s)

TAKANO ET AL.

Examiner

John m. Cooney

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

Applicant's arguments filed 10-5-06 have been fully considered but they are not persuasive.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, and 6-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The now claimed range of molecular weight values for the antiozonant component of applicants' claims lacks support in the originally filed disclosure, and it is not evident that the invention as is now claimed was described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

While the disclosure of the examples provide support for the now claimed "586.6" endpoint value for the antioxidant component of applicants' claims, they do not provide support for the range of molecular weight values now claimed for the antiozonant component of the claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh et al. (5,990,186).

Katoh et al. disclose polyurethane sealing materials comprising polyurethane foams prepared from material components including antioxidants, antiozonants, catalysts, isocyanates, and polyester polyols prepared from dimer acid initiators having molecular weights as claimed (see abstract, column 4 lines 5-29, column 6 lines 22-35, 57-60, column 17 lines 44-46, & 59 et seq, column 18 lines 25-53, claim 12, and the tables & examples, as well as, the entire document).

Katoh et al. differs from applicants' claims in that blends of the respective antiozonants and antioxidants specifically required to have molecular weights within the ranges of values claimed by applicants are not particularly demanded. However, within Katoh et al. species of compounds as claimed by applicants are recited as being employed for purposes of imparting their respective antioxidant and antiozonant effects in articles formed (see again column 4 lines 17-37, column 17 lines 64-65 and column and 18 lines 25,26,28,29, and 49-53) . Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the disclosed ozone inhibiting and

antioxidant compounds disclosed by Katoh et al. in combination within the preparations of Katoh et al. for the purpose of imparting their respective antioxidant and antiozonant effects to articles realized in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Claims 1, 2, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clauss(5,869,565).

Clauss discloses polyurethane sealing materials comprising polyurethane foams prepared from material components including antioxidants, antiozonants, catalysts, isocyanates, and polyols which read on the products as claimed (see the entire document).

Clauss differs from applicants' claims in that blends of the respective antiozonants and antioxidants specifically required to have molecular weights within the ranges of values claimed by applicants are not particularly demanded. However, within Clauss species of compounds as claimed by applicants are recited as being employed for purposes of imparting their respective antioxidant effects in articles formed. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the disclosed antioxidant compounds disclosed by Clauss in combination within the preparations of Clauss for the purpose of imparting their respective antioxidant and degradation inhibiting effects to articles realized in order to arrive at the

products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Applicants' arguments have been considered. However, it is maintained that applicants' have not made a sufficient showing of new or unexpected results commensurate in scope with the scope of the claims attributable to employment of the combinations of antioxidants and antiozonants as defined by the claims in the compositions as claimed. Further, applicants do not distinguish their products based on the materials as defined by the claims or the means by which the antioxidants are incorporated. Applicants' arguments as to presence and employment of antioxidant and synthesizing antioxidant are unpersuasive as the distinctions discussed in applicants' reply are not reflected by the limitations of applicants' claims. Applicants' claims merely require products formed from the materials recited, and they do not require that the synthesizing antioxidant be present in during formation of the polyol used as the polyol of the claims. Additionally, applicants have not provided clear and convincing factual evidence that inclusion of the antioxidants in the manner as claimed results in products which do in fact differ from the manner in which they are included in the cited prior art. Nor have applicants come forward with evidence establishing unobvious differences between the claimed product and the prior art product.

Applicants' arguments as to the molecular weight values of their claims have been considered. However, examiner maintains selection of antioxidants and antiozonants having molecular weights within the ranges of values claimed are set forth

in patentees' disclosure such that examiner's position set forth in the rejection above is appropriate and should be sustained. Finally, as to the applicants' argument that the problem of reducing volatile organic compounds is not addressed by patentees, it is held that in determining patentability, the weight of the actual evidence of unobviousness presented must be balanced against the weight of obviousness of record. *In re Chupp*, 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *In re Beattie*, 24 USPQ 2d 1040. That patentees may be concerned with solving a different problem than applicants does not negate examiner's position of obviousness. Burden is upon applicants' to demonstrate unexpected properties that are more significant than expected properties in order to rebut a prima facie case of obviousness. *In re Nolan* 193 USPQ 641 CCPA 1977. Obviousness does not require absolute predictability. *In re Miegel* 159 USPQ 716. Rejection is maintained as proper and applicants have not demonstrated new or unexpected results which are clearly and convincingly unexpected or more significant than being secondary in nature and commensurate in scope with the scope of products now claimed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY, JR.  
PRIMARY EXAMINER  
Group 1700